1) Are there any standards for the body construction? Aluminum, steel, thickness etc?

Best manufacturing processes to maximize strength and minimize weight.

2) Is there a minimum interior height?

The minimum interior height is 77" (6 ft, 5 in). The choice of 4WD package will have a lot to do with the chassis height, then working backwards from the overall specified height you are left with the interior height.

3) What is the floor height of the flatbed trailer?
These questions are asked because the loaded height of the unit cannot exceed 13'6".

The deck height of the flatbed is 18". The intent is to be able to transport the Emergency vehicle utilizing a standard RGN trailer without the need for permits or flag escorts.

4) Please be advised that there is a problem regarding the specifications for the chassis. As the specifications stand, there are no GVWR requirements on the axles leaving it up to the bidders. Because of the axle placement to accommodate the body size the generator will have to go in front of the rear axle. This transfers a great deal of weight to the front axle. 4WD also puts a lot of weight on the front by design. The largest factory front axle on a 4WD chassis is 8,000#.

There are very limited choices of gas engine trucks in the 21-25,950 GVWR range. There are fewer choices available with four wheel drive from the manufacturer. When we did a load calculation of the vehicle, there is not a factory built 4WD gas engine chassis made with a heavy enough front axle to safely handle the load this vehicle requires.

Placement of the generator is completely up to the vendor.

5) Overloading the front axle is wrong for builders and will make the truck completely unsafe to drive. This vehicle needs a minimum of a 9,000# front axle and should really have a 10,000# front.

The FAA agrees that the vendor should supply calculations showing that the modifications made to the chassis have not overloaded the manufacturers specified GVWR.

6) One alternative is to purchase a medium duty chassis and have an after market 4WD conversion done. The only kits that they have are for air brake chassis. Since the specs do not call out air brakes, we assume that standard hydraulics brakes are desired. The lead time for the chassis is 8-12 weeks. The lead time for the conversion is six months for parts alone. We know that will not be acceptable.

The vendor should supply calculations showing that the added weight and modifications to the chassis have not overloaded the braking system. If air brakes are required they should be justified by data.

7) The specifications need to be detailed so all bidders are on a level field. There should also be requirements for weight calculations (which should be done by any responsible bidder) submitted with the bid. Because of the tiered evaluation process, some of the smaller companies may not have the resources or experience to know this. Therefore it is incumbent that it be provided.

The FAA will not define the solution. The submittal of design documentation and specifications is part of the evaluation criteria for the proposal(s). The FAA may, as part of

the technical evaluation, conclude that a vendor unable to adequately design the product is unlikely to be able to produce a viable product.

Vendors should state in their proposal that the vehicle is safe to operate on-highway at highway speeds, off-highway on paved roads, unpaved but reasonably maintained roads, with extreme weather fluctuations between 10℉ and 100℉ with relative humidity extremes and on inclines or declines up to 27.5°.